

b) a plurality of electrically conductive hard particles positioned on the substrate, such that each of the electrical contact sites has at least one electrically conductive hard particle associated therewith, wherein the at least one electrically conductive hard particle is affixed in direct contact with a conductive surface of its associated electrical contact site.

22. (Amended) An electrical component assembly as described in claim 21, further comprising a layer of nickel plated on each of the electrical contact sites, wherein the layer of nickel affixes the at least one electrically conductive hard particle to the conductive surface of its associated electrical contact site.

23. (Amended) An electrical component assembly as described in claim 21 further comprising an non-conductive adhesive material applied to at least selected portions of the surface of the substrate and the plurality of electrically conductive hard particles.

26. (Amended) An electrical component assembly as described in claim 23, further comprising a thin layer of metal plated on each of the electrical contact sites, wherein the thin layer of metal affixes the at least one electrically conductive hard particle to the conductive surface of its associated electrical contact site.

28. (Amended) An electrical component assembly as described in claim 95, wherein the nonconductive hard particle core is selected from the group consisting of: diamond, garnet and silicon carbide.

48. (Amended) A printed circuit interconnection assembly comprising: a printed circuit board substrate having a plurality of electrical contact sites on a surface thereof; and

a plurality of electrically conductive hard particles positioned on the substrate, such that each of the plurality of electrical contact sites has at least one electrically conductive hard particle associated therewith, wherein the at least one electrically conductive hard particle is affixed in direct contact with a conductive surface of its associated electrical contact site.

51. (Amended) A printed circuit interconnection assembly as described in claim 48, further comprising a thin metal layer plated on each of the electrical contact sites,

cont'd
wherein the thin metal layer affixes the at least one electrically conductive hard particle to the conductive surface of its associated electrical contact site.

93. (New) An electrical component assembly as described in claim 22, wherein the at least one electrically conductive hard particle comprises a nonconductive hard particle core with an outer surface that is coated by the layer of nickel.

94. (New) An electrical component assembly as described in claim 26, wherein the at least one electrically conductive hard particle comprises a nonconductive hard particle core with an outer surface that is coated by the thin layer of metal.

Subs.
95. (New) An electrical component assembly as described in claim 21, wherein each of the plurality of electrically conductive hard particles comprises a nonconductive hard particle core with an outer surface coated by a conductive material.

96. (New) An electrical component assembly as described in claim 21, wherein each of the plurality of electrically conductive hard particles comprises a diamond particle core with an outer surface coated by a layer of nickel.

97. (New) A printed circuit interconnection assembly as described in claim 51, wherein the at least one electrically conductive hard particle comprises a nonconductive hard particle core with an outer surface that is coated by the thin metal layer.

98. (New) A printed circuit interconnection assembly as described in claim 97, wherein the nonconductive hard particle core is comprised of diamond.

99. (New) A printed circuit interconnection assembly as described in claim 97, wherein the thin metal layer comprises a layer of nickel.

100. (New) A printed circuit interconnection assembly as described in claim 48, wherein each of the plurality of electrically conductive hard particles comprises a diamond particle core with an outer surface coated by a layer of nickel.